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A.D. 1864, 29th April. N° 1073.

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SPECIFICATION

OF

MR ANTOINE FRANCOIS MENNONS.  
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IMPROVEMENTS IN THE PREPARATION OF FLUID MEDICINES.

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LONDON:

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1864.







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A.D. 1864, 29th APRIL. N<sup>o</sup> 1073.

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### Capsulation of Fluid Medicines.

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**LETTERS PATENT** to Marc Antoine François Mennons, of the Firm of Mennons and Telescheff, Home and Foreign Patent Agents, of Abingdon Chambers, in the City of Westminster, and 24, Rue de Dunkerque, Paris, in the Empire of France, for the Invention of "**AN IMPROVED APPARATUS FOR THE CAPSULATION OF FLUID MEDICINES.**"—A communication from Jules Viel, residing at Tours (Dep<sup>t</sup>. de l'Indre-et-Loire), in the Empire of France.

Sealed the 20th October 1864, and dated the 29th April 1864.

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**PROVISIONAL SPECIFICATION** left by the said Marc Antoine François Mennons at the Office of the Commissioners of Patents, with his Petition, on the 29th April 1864.

I, MARC ANTOINE FRANÇOIS MENNONS, of the Firm of Mennons and Telescheff, Home and Foreign Patent Agents, of Abingdon Chambers, in the City of Westminster, and 24, Rue de Dunkerque, Paris, in the Empire of France, do hereby declare the nature of the said Invention for "**AN IMPROVED APPARATUS FOR THE CAPSULATION OF FLUID MEDICINES,**" to be as follows:—

This Invention consists in an improved combination of mechanism forming  
10 an apparatus, by means of which gelatinous and other capsules or globules may, by a single process, be moulded to the required size, charged with the medicinal fluid, and hermetically closed for use.

Figure 1 of the accompanying Drawing is a perspective view of the complete apparatus.



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A is a cast-iron frame, on which are mounted the different parts of the combination; B is a slide piece, provided at its fore extremity X with a mould plate C<sup>1</sup>, corresponding with a second mould plate C, fixed to the support A. Each of these plates is surrounded by a moveable frame, serving as gauge for the quantities of plastic matter admitted by the capacity of the moulds; these 5 frames project beyond the level of the moulds, in which position they are maintained by two springs set behind each plate; opposite the extremity of each spring a hole is pierced through the plate for the reception of small stud pins, which bear on the springs and frames, in such a manner that the projection of the latter always corresponds with the thickness of plastic matter required. 10 D, E, closer ("soudeur"), composed of two parts, one of which (D) is moveable, while the other (E) is fixed to the frame (A,) and serving to close at their edges the strips of plastic matter F, F, so as to form a species of tube. This closing apparatus is set above the mould plates at a distance equal to the height of the latter; G, G, are bobbins, on which are rolled the strips of 15 paste F, F; H is a glass funnel fitted with the stop-cock L, and with a socket, which, passing from end to end descends almost to the plate C; I is a lever, by means of which is brought down the precise quantity of plastic matter required to cover the moulds; J, fly wheel mounted on the end of a screw set in the slide piece B, and serving to move forward the mould plate C<sup>1</sup> towards 20 its stationary counterpart C; K, fly wheel by which the closing apparatus is opened and shut; M, opening pierced through the framework A and table N, to give passage to the capsules produced; T, pipe communicating with a steam boiler of any convenient form, by means of which the apparatus may be heated to a temperature of about 20° to 25° centigrade (=68° to 77° Fahren- 25 heit); U, steam chest; Y, purge pipe.

Figure 2 represents the arrangement by means of which the strips or bands of plastic matter are prepared for use. O, O, is a metallic tablet of any required length; say, for instance, six feet, by four inches in width, provided with edges forming at each side a ridge of about one-fiftieth of an inch in 30 height, corresponding with the thickness to be given to the strip of paste; P is a charriot or sliding box, in which is placed the hot plastic matter. In the bottom, and below the front of this box, is cut a narrow oblong slit, corresponding in length with the width comprised between the ridges of the tablet O, O; Q, key fixed to the stopper of the slit; R, slide piece worked by a screw S, 35 and serving to gauge the thickness of the paste. The charriot P being charged with the hot plastic matter, the slit is opened by a forward motion of the key Q, allowing the paste to flow along the tablet O, O. It is then moved forward to the opposite end of the tablet, at which is formed a cavity Z for the



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reception of the surplus plastic matter, and the slit being closed by a reverse motion of the key, the same operation is repeated as often as may be required. The bands of paste thus prepared being wound on the bobbins G, G, Fig. 1, their extremities are brought down to the base of the closing apparatus D, E, 5 previously opened. This apparatus is then shut by aid of the fly wheel K; and in this movement closes off by pressure the edges of the plastic bands, after which it is re-opened to permit of the latter being brought down by the lever I. This operation is repeated four times, the lever being carried up at each shut-off motion of the closing apparatus. The fly wheel J is then set in 10 action to carry up the free mould plate C<sup>1</sup> to its stationary counterpart C, and the plastic tube being pressed, its lower extremity is closed to form a species of bag. The fly wheel J being reversed, the tube comes still further down, and the stop-cock L being opened admits thereto the required quantity of fluid. The same fly wheel is then again turned forward to bring the mould 15 plates again together, and in this motion 25, 30, or 60 capsules, as the case may be, being finally filled, closed, and detached, are carried by the opening M into a drawer placed for their reception below the table of the apparatus.

**SPECIFICATION** in pursuance of the conditions of the Letters Patent, filed by the said Marc Antoine François Mennons in the Great Seal Patent 20 Office on the 24th October 1864.

**TO ALL TO WHOM THESE PRESENTS SHALL COME, I, MARC ANTOINE FRANÇOIS MENNONS**, of the Firm of Mennons and Telescheff, Home and Foreign Patent Agents, of Abingdon Chambers, in the City of Westminster, and 24, Rue de Dunkerque, Paris, in the Empire of France, send 25 greeting.

**WHEREAS** Her most Excellent Majesty Queen Victoria, by Her Letters Patent, bearing date the Twenty-ninth day of April, in the year of our Lord One thousand eight hundred and sixty-four, in the twenty-seventh year of Her reign, did, for Herself, Her heirs and successors, give and grant unto 30 me, the said Marc Antoine François Mennons, Her special licence that I, the said Marc Antoine François Mennons, my executors, administrators, and assigns, or such others as I, the said Marc Antoine François Mennons, my executors, administrators, and assigns, should at any time agree with, and no others, from time to time and at all times thereafter during the 35 term therein expressed, should and lawfully might make, use, exercise, and vend, within the United Kingdom of Great Britain and Ireland, the Channel



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Islands, and Isle of Man, an Invention for “AN IMPROVED APPARATUS FOR THE CAPSULATION OF FLUID MEDICINES,” upon the condition (amongst others) that I, the said Marc Antoine François Mennons, my executors or administrators, by an instrument in writing under my, or their, or one of their hands and seals, should particularly describe and ascertain the nature of the said Invention, 5 and in what manner the same was to be performed, and cause the same to be filed in the Great Seal Patent Office within six calendar months next and immediately after the date of the said Letters Patent.

NOW KNOW YE, that I, the said Marc Antoine François Mennons, do hereby declare the nature of the said Invention, and in what manner the 10 same is to be performed, to be particularly described and ascertained in and by the following statement, reference being had to the Figures of the accompanying Drawing, and to the letters marked thereon, that is to say:—

This Invention consists in an improved combination of mechanism forming an apparatus, by means of which gelatinous and other capsules or globules 15 may, by a single process, be moulded to the required size, charged with the medicinal fluid, and hermetically closed for use.

Figure 1 of the accompanying Drawing is a perspective view of the complete apparatus.

A is a cast-iron frame, on which are mounted the different parts of the 20 combination; B is a slide piece, provided at its fore extremity X with a mould plate C<sup>1</sup>, corresponding with a second mould plate C fixed to the support A. Each of these plates is surrounded by a moveable frame, serving as gauge for the quantities of plastic matter admitted by the capacity of the moulds; these frames project beyond the level of the moulds, in which position they are 25 maintained by two springs set behind each plate. Opposite the extremity of each spring a hole is pierced through the plate for the reception of small stud pins, which bear on the springs and frames in such a manner that the projections of the latter always correspond with the thickness of plastic matter required. D, E, closer (soudetur”), composed of two parts, one of which, D, 30 is moveable, while the other, E, is fixed to the frame A, and serving to close at their edges the strips of plastic matter F, F, so as to form a species of tube. This closing apparatus is set above the mould plates, at a distance equal to the height of the latter. G, G, are bobbins, on which are rolled the strips of paste F, F; H is a glass funnel fitted with the stop-cock L, and with a socket, 35 which passing from end to end descends almost to the plate C; I is a lever, by means of which is brought down the precise quantity of plastic matter required to cover the moulds; J, fly wheel mounted on the end of a screw set in the slide piece B, and serving to move forwards the mould plate C<sup>1</sup> towards



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its stationary counterpart C; K, fly wheel, by which the closing apparatus is opened and shut; M, opening pierced through the framework A and table N of the apparatus to give passage to the capsules produced; T, pipe communicating with a steam boiler of any convenient form, by means of which the apparatus may be heated to a temperature of about 20 to 25 centigr. (68° to 77° Fahrenheit); U, steam chest; Y, purge pipe.

Figure 2 represents the arrangement by means of which the strips or bands of plastic matter are prepared for use. O, O, is a metallic tablet of any required length; say, for instance, six feet, by four inches in width, provided with edges forming at each side a ridge of about one-fiftieth of an inch in height, corresponding with the thickness to be given to the strip of paste; P is a charriot or sliding box, in which is placed the hot plastic matter. In the bottom, and below the front of this box, is cut a narrow oblong slit, corresponding in length with the width comprised between the ridges of the tablet O, O; Q, key fixed to the stopper of the slit; R, slide piece worked by a screw S, and serving to gauge the thickness of the paste. The charriot P being charged with the hot plastic matter, the slit is opened by a forward motion of the key Q, allowing the paste to flow along the tablet O, O. It is then moved forward to the opposite end of the tablet, at which is formed a cavity Z for the reception of the surplus plastic matter, and the slit being closed by a reverse motion of the key, the same operation is repeated as often as may be required. The bands of paste thus prepared being wound on the bobbins G, G, Fig. 1, their extremities are brought down to the base of the closing apparatus D, E, previously opened. This apparatus is then shut by aid of the fly wheel K, and in this movement closes off by pressure the edges of the plastic bands, after which it is re-opened to permit of the latter being brought down by the lever I. This operation is repeated four times, the lever being carried up at each shut-off motion of the closing apparatus. The fly wheel J is then set in action to carry up the free mould plate C<sup>1</sup> to its stationary counterpart C, and the plastic tube being pressed, its lower extremity is closed to form a species of bag. The fly wheel J being reversed, the tube comes still further down, and the stop-cock L being opened admits thereto the required quantity of fluid. The same fly wheel is then again turned forward, to bring the mould plates again together, and in this motion 25, 30, or 60 capsules, as the case may be, being finally filled, closed, and detached, are carried by the opening M into a drawer placed for their reception below the table of the apparatus.

Having now described the nature of the said Invention, and the manner of carrying it into effect, I would have it understood that I do not confine myself to the precise details of form and dimensions above laid down, as these may



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be modified according to circumstances ; but what I claim and desire to secure by Letters Patent is, the improved combination of mechanism, substantially as herein set forth and shewn in the Drawing, by means of which a certain number of gelatinous and other capsules or globules may, by a single process, be moulded to the required size, charged with medicinal fluid, and hermetically 5 closed for use.

In witness whereof, I, the said Marc Antoine François Mennons, have hereto set my hand and seal, this Twenty-fourth day of October, in the year of our Lord One thousand eight hundred and sixty-four.

M. F. MENNONS. (L.S.) 10

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LONDON :

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FIG. 1.

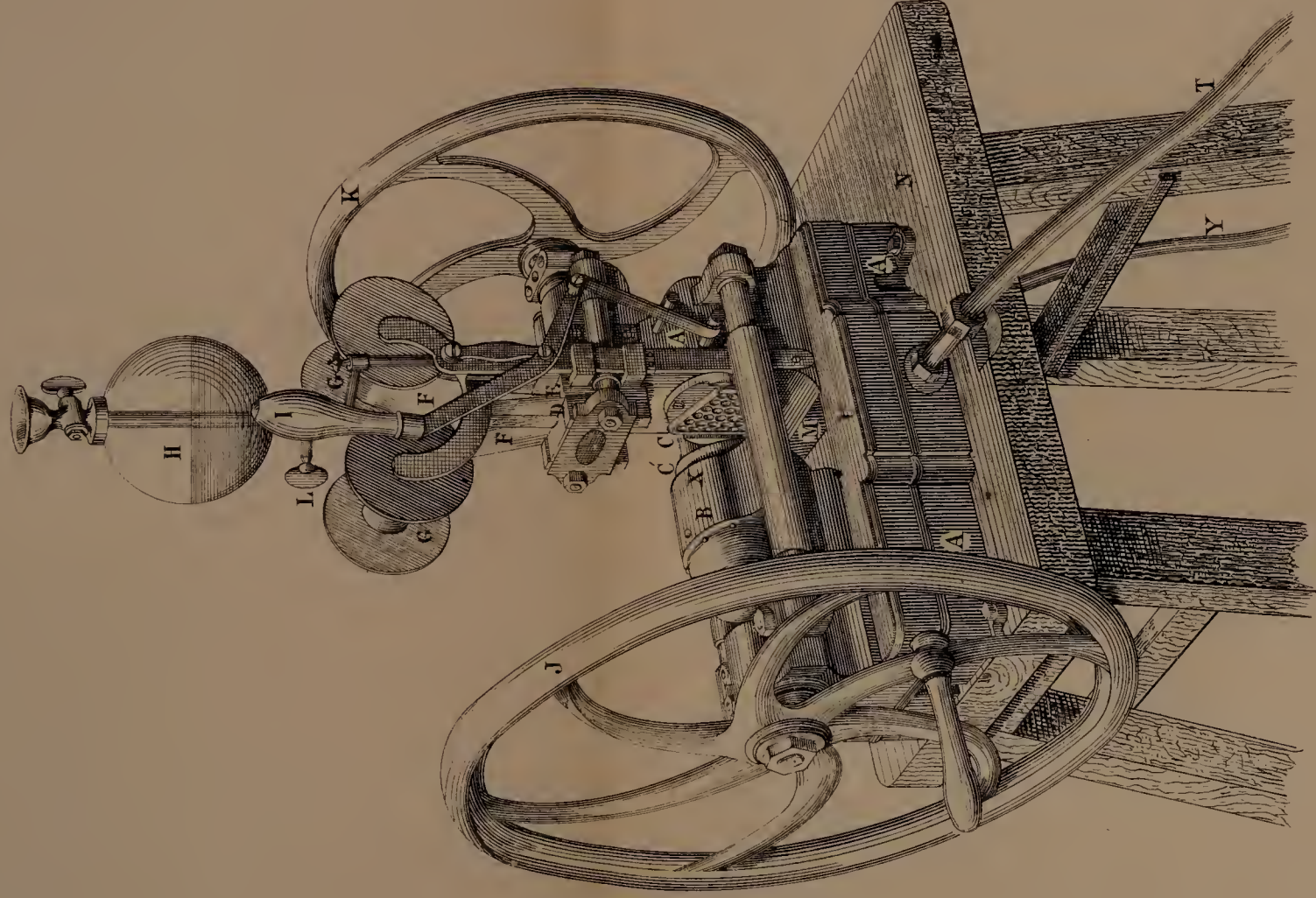
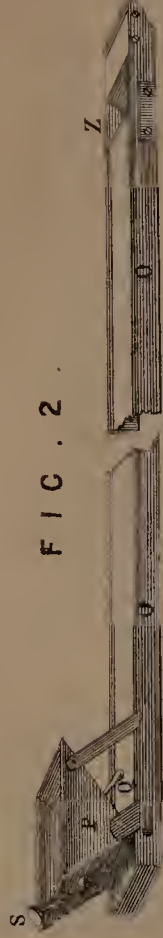


FIG. 2.



*The drawing left with Provisional Specification is not colored.*

Drawn on Stone by Malby & Sons







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MENNON S' SPECIFICATION.

(1 SHEET)

FIG. 1.

